WO 2005/071169 PCT/GB2005/000094

Claims

1. An excavator bucket having an adjustable cutting width, the bucket comprising a back plate, a pair of spaced apart side walls, and a width adjustment mechanism, wherein the distance between the side walls is adjustable to vary the cutting width of the bucket, and wherein the mechanism provides for adjustment of the distance between the said side walls.

- 2. An excavator according to Claim 1, wherein each side wall includes a hinge having a longitudinal axis and a side plate attached to the hinge for pivotal movement about the said axis, and wherein the mechanism provides for movement of the side plates about said axis to adjust the cutting width.
- 3. A bucket according to Claim 2, wherein the mechanism comprises a pair of arms, a mounting member and an actuator, wherein each one of the arms is attached to a respective one of the side plates, and to the mounting member, and wherein adjustment of the actuator generates the said movement of the side plates.
- 4. A bucket according to Claim 3, wherein each arm is fixedly attached to a respective one of the said side plates.
- 5. A bucket according to Claim 3 or 4, wherein each arm is pivotally connected to the mounting member.
- A bucket according to Claim 5, wherein each arm is pivotally mounted in the mounting member about a bearing.
- 7. A bucket according to Claim 6, wherein the said bearing is a bush.
- 8. A bucket according to Claim 7, wherein the bush is made of a compressible material.
- 9. A bucket according to any of Claims 2 to 8, wherein each arm comprises a cam surface, and wherein each arm is pivotally mounted on the mounting means such that the said cam surface of one arm touches the corresponding cam surface of the other arm through the range of pivotal movement of the said arm.

WO 2005/071169 PCT/GB2005/000094

10. A bucket according to any Claims 2 to 9, wherein the actuator comprises an externally threaded bar, which passes through a co-operating internally threaded bore, wherein one end of said bar is rotatably located in the mounting member.

- 11. A bucket according to any preceding claim, wherein the actuator comprises a piston and cylinder arrangement.
- 12. A bucket according to any of Claims 2 to 11, wherein the mounting member is located within the bucket in front of the back plate and behind the said longitudinal axis of the hinges.
- 13. A bucket according to Claim 12, wherein with the side plates opened to their widest position, the plane in which the pivot mountings of the arms lie remains between the back plate and the longitudinal axes of the hinges.
- 14. A bucket according to any preceding claim, wherein a base plate extends from a bottom edge of each side plate or side plate towards the centre of the bucket.
- 15. A bucket according to Claim 14, wherein a free edge of one base plate substantially abuts a free edge of the other base plate with the side plates in a substantially parallel configuration.
- 16. A bucket according to Claim 14 or 15, wherein another free edge of each base plate forms a cutting edge.
- 17. A bucket according to Claim 16, wherein a planar surface of each base plate substantially abuts a planar surface of the back plate.
- 18. An excavator bucket substantially as described with reference to, and as shown in, the drawings.